



## IMPACT OF DIGITAL BANKING IN INDIA – A STUDY

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**Abstract:** Banking sector play a very crucial role in the financial system of an economy. It facilitates the creation and maintenance of a robust payment system to meet the requirements of businesses, the government and general public. It also serves as a credit delivery mechanism, which can be accessed by those who are in need of funds. Overall, the banking sector of the economic activities represents the center of a nation Thus, a strong and healthy banking system is essential for economic growth. The Indian banking sector, at present is witnessing an IT revolution and is heading towards digitalization. The internet and IT has entirely changed the way of functioning of banks and the financial institutions. The Information technology was introduced in the Indian banking sector in the late eighties. However, current phase of IT revolution is more intense and impactful, which probably has the potential to change not only the banking landscape, but the overall structure and direction of the economy. The modernization of banking sector, after the introduction of IT and internet has benefitted both the customers as well as banks. The banking now is not just limited to transactions in the branches, but it has made its way into hand held devices like smart phones and tablets. The current phase of banking may be aptly called as 'Digital Banking'.

**Key Words:** Technology, Banking, IT, Digital.

### 1. INTRODUCTION :

The world in which we are living is continuously on the move. it is changing every day and consequently compelling us to change the way we live. Every now and then a new invention, innovation or technology is finding its way into our life and effecting a change in our lifestyle. Technology has become an essential part of our life and it is definitely having its impact on every facet of our life. With each passing day, we are becoming more and more dependent on technology for our daily needs. If we have to single out and name one such technology which has changed the world in the last 50 years or so, then unquestionably it has to be internet. After the introduction of internet and its subsequent widespread popularity and use, almost all the inventions and innovations have been focused around the usage of internet. The internet has revolutionized the computerized communications world like never before. It is at once a worldwide broadcasting capability, a mechanism for information dissemination, and a medium for collaboration and interaction between individuals and their computers with regard to geographical location. The internet represents one of the most successful examples of the benefits of sustained investment and commitment to research and development of information infrastructure. The internet and IT has completely changed the way the business is done. The customer perception towards the business has also changed. They expect that business should not only provide quality goods and services, but those should be delivered at a lightning speed. To meet the ever-increasing expectations of the customers combined with rising competition in the market and to survive in an environment of technological innovations, businesses need to act proactively and evolve themselves continuously.

**1.1. OBJECTIVE:** The objective of the present paper is to discuss the emergence of Digital banking landscape in India and the challenges which are lying ahead, which need to be tackled so that the nation can go ahead in the path of becoming digital economy.

### 2. DIGITAL BANKING:

We are familiar with the term 'E-Banking, which is also known as Online Banking or Virtual Banking or Internet Banking. It is a system which enables banking transactions like transfer of funds, payment of loans and EMIs, deposits and withdrawals of cash virtually with the help of internet and without having the need to visit the bank branches. Under e-banking, a customer can number of get the benefit of services like Internet banking, SMS banking, ATMs, Mobile banking, e-cheques and debit/credit cards.

Digital banking is another term which is often used as synonymous to e-banking. Both the terms are used



interchangeably. But strictly speaking, digital banking means no or very minimal use of paper currency. However, the paper currency is still very much in use. At present ATMs are vital part of the banking system, which facilitate customers in withdrawal of cash as and when there is need. A digital economy is one where cash transactions are very less. Generally we consider cash as something which is free. However, use of cash comes at a significant cost. A research article by Harvard Business Review titled "The countries that would profit most from cashless world" explains about the cost of cash. The cost of cash include cost to consumers (including ATM fees, money changers etc. and the implicit cost of time spent to collect cash), cost to businesses (for handling cash and ensuring its security and transportation to safe locations), cost to banks and other institutions (for moving and storing cash, operating and maintaining ATMs), and cost to government (from foregone tax revenues and costs of printing money. India's cost of cash sore among the highest in a global comparison.

Now imagine a banking system where use of cash is very less. This will result in massive reduction in costs benefitting both the banking sector as well as the customers.

### **3. GOING DIGITAL - INDIAN BANKING SECTOR:**

Earlier manual system of recording and retrieval of banking data was in use. Nowadays, all banks have adopted the use of electronic banking. It has become a rule rather than an exception. Under traditional banking, the functions of the banks were more or less limited to accepting deposits and giving loans and advances. With the advent of Information Technology, the banking and financial sector has moved forward and we are witnessing innovation in the product designing and their delivery to cater to needs of the customers. The need for computerization was felt in the Indian banking sector in the late 1980s in order to improve customer service, book keeping and MIS reporting. Reserve Bank of India set up a Committee on Computerization in banks in 1988, which was headed by Dr. C. Rangarajan. The report of the committee was the most comprehensive road map for bank automation paving the way for computerization in banks. The game changer was the introduction of new economic policy in 1991. In the same year, the recommendations of the Committee on Financial System, headed by former RBI Governor M. Narasimham were implemented. One of recommendations of the Committee was to allow the entry of foreign and private players in the Indian banking sector. These players changed the entire banking landscape. They brought in new and advanced technologies and started delivering technology-based world class quality services to the customers through Automated Teller Machines (ATMs), credit cards and internet banking. It was the beginning of an era, where the rigorous use of IT in banking was to become a norm.

At the initial phase, banks used IT with the introduction of standalone PCs and then there was a gradual shift to LAN connectivity. With passage of time, there was further the advancement and the banks adopted the Core Banking platform. With this, there was a change in the way banking was done as the banking transformed from Branch banking to Bank banking. Core Banking Solutions (CBS) enabled the banks to enhance the convenience of customers through anywhere and anytime banking. A number of CBS platforms started to gain popularity which included FINACLE by Infosys, BaNCS by TCS, FLEXCUBE by I-flex. As mentioned earlier, opening up of economy in 1991, to a very great extent, helped the process of computerization in the banking sector gain pace. The public sector banks, which were sailing smooth until now, were suddenly facing the storm of competition from the new entrants, i.e., private sector and foreign banks. These new entrants started operating with advanced and new age technologies providing smoother and faster services which started attracting more and more customers towards public sector banks were left with them. The no other option but to upgrade themselves to counter the moves of the private and foreign banks and remain competitive and relevant in the market.

There is no doubt that customer was the ultimate beneficiary of this new approach of the banks as they experienced a new and wider range of services, which were provided through innovative channels and at a faster pace than what was done earlier. But banks themselves were also benefitted by adopting newer technologies. Ever increasing cost of operations is major challenge for banking sector which magnified with increase competition after the entry of private and foreign banks. E-banking has resulted in reducing costs drastically and also helped the banks to generate revenue through various channels. As per estimates, cost of bank transaction on Branch banking is in the range of Rs. 70 to Rs. 75, while it is around Rs. 15 to Rs. 16 on ATM, Rs. 2 or less on online banking and Rs. 1 or less on mobile banking. The trends and progress in the Indian Banking the technology developments sector is show:

In August 2016, around 93,000 UPI transactions (cumulatively valued at Rs.3.1 crore) took place through 21 banks. This, in July 2018, multiplied manifold to 23.5 crore transactions (valued at RS. 45,843 crore) through 114 banks. The shift towards UPI gathered pace post-demonetization, when there was a scarcity of cash in the market.

BHIM app, which was launched in December 2016, has also seen a huge jump in the transactions from a mere 43,000 at the beginning to 1.64 crores in July 2016. The value of transaction has increased to Rs. 6692 crores from Rs. 1.83 crores. It saw million downloads within week of its launch. It has reached more than 32 million downloads now.



#### 4. DEMONETIZATION EFFECT:

The story of digital transformation is incomplete without a chapter on of Indian economy demonetization. 8<sup>th</sup> November 2016 was an eventful day not only for the Indian economy, but for the whole of India. The central government took a very bold step which led to withdrawal of 86 percent of Indian currency. There was an immediate ban on highest denomination bills of Rs. 500 and Rs. 1000. Due to this sudden move, there was immediate shortage of cash in the market. As a result retail sales went down, wholesale market stumbled.

Indian economy is one of the largest economies in the world. But there are millions of businesses and hundreds of millions of people having either no access to banks or don't have bank accounts. These businesses use cash for their day to day dealings and the individuals need cash to pay for everything from groceries to hospital stays to land purchases. Then there is a shadow economy which exists alongside the main economy comprising of countless hidden transactions, which are almost impossible to trace. This shadow economy, which is believed to be about a quarter of the country's Gross Domestic Product, operates in cash. The current demonetization exercise is not the first one in India. A similar attempt was made in 1970s to curb the corruption, but eventually it failed in its purpose. Since then, the shadow economy or the underground economy has grown immensely. The main objective behind the whole demonetization exercise was to curb the menace of black money and weeding out the counterfeit currencies out of circulation. However, it went out to serve another useful purpose. It pushed people towards digital money as they searched for alternatives of cash. The result of the demonetization was a situation of chaos with people standing in long queues outside the bank branches to exchange their old currency notes which were no longer a legal tender. To reduce the discomfort of the general public, the government continued expanding options for digital payments to reduce the economy's dependence on cash. Non-cash payments saw a surge immediately following the enactment of demonetization policy in November 2016, when cash circulation fell by two thirds. Digital transactions volume grew 43 percent between November and December 2016.

The government set a target of Rs. 25 billion cashless transactions for the fiscal year ending March 2018. According to a report, by the end of March 2018 digital initiatives such as digital wallet payments, electronic toll payments, Aadhaar based and bank-to-bank electronic money transfers accounted for about Rs 20 billion worth of transactions, but fell short of the target. The performance of private sector banks was better than the public sector banks primarily on account of the concentration of their operations in urban areas. Even though the target was not achieved the standalone figures indicate that the achievement is commendable.

#### 5. CHALLENGES AHEAD:

The demonetization exercise has given a much needed push to the Indian economy towards going digital. However, the journey is not a cakewalk, as there are many challenges ahead. Some of these challenges are discussed below:

- **Internet Penetration:** As per a report titled "Internet in India 2017" by Internet and Mobile Association of India (IAMAI) and Kantar IMRB, the number of internet users stood at 481 million in December 2017, which is second highest in the world. Urban India with an estimated population of 455 million has 295 million internet users whereas rural India, with an estimated population of 918 million as per 2011 census, has only 186 million internet users leaving out potential 732 million users in India. This indicates a very low internet penetration, which is a major obstacle in the path of digital banking.
- **Internet Shutdowns:** Internet shutdowns are one of the major hindrances in seamless connectivity which is required for digital banking. In the current year, India has already witnessed 95 internet shutdowns as against 79 such cases in the whole year of 2012 as per the data compiled by Software Freedom Law Centre (SFIC, a legal services organization). Although the problem of shutdown exists across many states, Jammu & Kashmir and Rajasthan are leading states. Frequent internet shutdowns result in serious disruptions and tremendous loss to individuals and businesses, and may prevent the nation from realizing the benefits of digital economy.
- **Inadequate Infrastructure:** India is having the highest number of bank branches in the world, but people in rural areas still have to travel miles to access banking interface. Although India is a huge country, it has only 2.3 lakh ATMs and 14 lakh Point of Sale (POS) terminals. Though digital channels like apps, websites, SMS/Text, ATM, video teller machines (VTMs) and e-kiosks are narrowing the gap between banks and customers, rural Indians are more comfortable with physical channels. A 2015 Ernst and Young report said there were only 693 machines per million of India's population, compared to similar emerging countries such as Brazil, which has 32,995 terminals per million people and China and Russia, each of which has around 4000 terminals per million people. Number of ATMs per million populations has been growing in almost every country. There are countries with 1,000-plus ATMs per million population - South Korea (2423 ATMs), Canada (1859), France (1745), Russia (1537) and Australia (1338) while the number is 180 for India,



which is lower than China (538) and South Africa(516).

- **Financial Literacy:** A survey was conducted by Standard & Poor's Financial Services LLC, where it was found that 76 percent of Indian adults are unable to understand key financial concepts, which is seven percentile points lower than the worldwide index. With better financial literacy will help these individuals in the selection of products that best suits their requirements. A financially aware individual is more likely to adopt the digital banking services and channels.
- **Cyber Crime and Security:** Digital banking has brought in comfort, convenience and flexibility in banking services. The flip side is that it has increased the risk of cybercrimes. Most banking and financial applications are subject to cyber-attacks. With so much money at stake, there is always a risk involved. There are hackers who employ innovative techniques to siphon funds, either as large amounts in a single shot, or minuscule amounts from hundreds and thousands of accounts, over a long period of time. Also, there is always the threat of valuable personal data being compromised. Banks need to ensure that their system is well maintained and upgraded to counter any threats from cybercrimes.

## 6. CONCLUSION:

Indian economy has come a long way from late 1980s when the computerization in banking sector has just begun to the present era of digital banking where smart phones are ruling. The demonetization exercise of November 2016 was very much instrumental in giving a push to the economy towards going digital. Although, cash is still considered very essential by the customers, the popularity of alternate modes of payment like mobile wallets and platforms like UPI and BHIM app is on the rise. There is little doubt that digital banking has brought in amazing customer experience with significant improvement in the delivery of banking services. However, Indian banking sector will have to overcome many challenges to make digital banking pervasive. Internet connectivity and associated digital infrastructure is to be ensured for making the digital dream a reality. Then there is the risk of cyber threats which may cause significant disruptions in the banking services apart from risks related to sensitive customer information and internet frauds. It will be interesting to see how these challenges are dealt with by the banking sector. The government and other stakeholders have an important role to play here. That will decide the pace and direction of the digital journey of our nation.

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